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(54) Title: PRODUCTION OF ZEAXANTHIN BY PHAFFIA

(57) **Abstract:** Disclosed is a process for producing zeaxanthin and β-cryptoxanthin which comprises cultivating a recombinant microorganism which is expressing a β-carotene hydroxylase gene and belonging to the genus Xanthophyllomyces (Phaffia) in an aqueous nutrient medium under aerobic conditions, and isolating the resulted carotenoids from the cells of said recombinant microorganism or from the cultured broth.